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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,995	10/22/2001	Lewis B. Aronson	9775-074-999	5310

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EXAMINER

BUI, HUNG S

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/036,995	ARONSON ET AL.	
	Examiner	Art Unit	
	Hung S. Bui	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-86 is/are pending in the application.
- 4a) Of the above claim(s) 58-86 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>04/23/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 58-86 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claimed invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 06/09/2005.

Claim Objections

2. Claim 28 is objected to because of the following informalities: "a modules" should be corrected as – a module--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9 and 12-21 and 24-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Lehman et al. [US 6,198,633].

Regarding claims 1 and 14, Lehman et al. disclose a host board system (figures 1-6), comprising:

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- a host board (50) at least partially positioned within a housing (figures 6a-b) having a set of openings (figures 3-4), the host board including a set of connectors (connectors mounted on the host board 50);

- each opening in the set of openings being aligned with at least two connectors from the set of connectors (figures 1, 3-4);

- the each opening configured to accept two modules (3u) of a first form factor so that each module of the first form factor is aligned and electrically coupled to one of the at least two connectors; and

- the each opening further configured to accept a single module (6u) of a second form factor so that the single module of the second form factor is aligned and electrically coupled to a first connector of the at least two connectors (figures 6a, 6b).

Regarding claims 2 and 15, Lehman et al. disclose the single module of the second form factor preventing electrical coupling with a second connector of the at least two connectors by another module (figure 1).

Regarding claim 3, Lehman et al. disclose the single module of the second form factor being mechanically coupled to the second connector Of the at least two connectors (figure 1).

Regarding claims 4 and 16, Lehman et al. disclose a set of inserts (figures 3-4), each insert from the set of inserts configured to plug at least a portion of an opening from the set of openings.

Regarding claims 5 and 17, Lehman et al. disclose a first insert (a first guide rail in a first row, figures 5a-b) from the set of inserts configured to plug only; the portion of

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the opening is further configured to accommodate one module of the first form factor (figures 3-4).

Regarding claims 6 and 18, Lehman et al. disclose a second insert (a second guide rail in a second row, figures 5a,-b) from the set of inserts configured to plug only; the portion of the opening is further configured to accommodate two modules of the first form factor (figures 3-4).

Regarding claims 7 and 19, Lehman et al. disclose a third insert (two guide rails from both side of the opening) from the set of inserts configured to plug only the portion of the opening is further configured to accommodate one module of the second form factor (figures 5a, 4 and 2).

Regarding claims 8 and 20, Lehman et al. disclose a fourth insert (10-8) from the set of inserts configured to completely plug the opening and prevent insertion of any modules.

Regarding claims 9 and 21, Lehman et al. disclose each module of the first form factor and each module of the second form factor includes a flange (figures 1 and 4), the flange extending around a perimeter of a respective module and abutting an insert from the set of inserts when the respective module is electrically coupled to a connector from the set of connectors (figures 1, 4 and 6a-b).

Regarding claims 12 and 24, Lehman et al. further disclose the host board system having a set of slots/holes on the host board (figures 1 and 3), each slot/hole from the set of slots/holes corresponding to a connector from the set of connectors (a plurality of connectors mounted thereon a card 50, figure 3) and configured to maintain

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an electric coupling between a module (3U or 6U, figures 6a,-b) and a connector from the set of connectors; the each slot/hole configured to accommodate a guide rail included on modules of the first form factor, the modules of the first form factor having a single guide rail; and adjacent slots/holes from the set of slots/holes configured to accommodate a pair of guide rails (figure 2) included on modules of the second form factor, the modules of the second form factor having a single pair of guide rails.

Regarding claims 13 and 25, Lehman et al. further disclose the each slot/hole including a means/screw (figure 3) for securing a guide rail included on a module within the each slot.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10-11 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehman et al. in view of Branch et al. [US 6,304,436].

Regarding claims 10-11 and 22-23, Lehman et al. disclose the instant claimed invention except for the housing comprising in part a bezel, the set of openings being distributed across the bezel.

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Branch et al. disclose an electronic system (figure 1) having a front panel/bezel (column 6, line 27) connected with a printed circuit board (26), wherein the panel has a set of openings (30) being distributed across the bezel (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a bezel panel design of Branch et al. for the panel of Lehman et al., for the purpose of providing effective EMI shielding.

7. Claims 26-30, 33-45 and 48-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson [US 6,166,917].

Regarding claims 26-27 and 42-45, Anderson discloses a host board system (figure 1) comprising:

- a host board (11), the host board including a set of connectors (14) mounted on the host board and a set of slots (22);
- each slot from the set of slots open to an edge of the host board (figure 1);
- the set of connectors positioned with respect to the set of slots such that a module (15a) with a first form factor slidably engages with a slot from the set of slots so as to electrically couple with a corresponding connector (17) from the set of connectors; and
- the set of connectors also positioned with respect to the set of slots such that a module (15b) simultaneously slides into adjacent slots so as to electrically couple with a first corresponding connector from the set of connectors; and

- the module (15b) slidably engaged with adjacent slots mechanically couples with a second corresponding connector from the set of connectors (figure 1).

Anderson discloses the instant claimed invention except for the module (15b) having a second form factor.

The specific form factor of the module would have been an obvious design choice based on the specific factor requirements to be used in the particular system.

Regarding claim 29, Anderson discloses the set of connectors being evenly spaced part so that each connector from the set of connectors can simultaneously accommodate a module with the first form factor (figure 1).

Regarding claim 30, Anderson discloses each slot from the set of slots having a central axis (25, 26) along which a module travels while when slidably engaged with a slot from the set of slots, the central axis superposes a central axis of a corresponding connector (figure 1).

Regarding claims 33 and 48, Anderson discloses wherein each module including a guide rail (29), the each slot from the set of slots being sized to accommodate the guide rail such that the guide rail is the portion of a module slidably engaged with and in contact with a respective slot (column 3, lines 59-6-8).

Regarding claims 34 and 49, Anderson further discloses each slot including fastener means (figures 5-7) for securing the guide rail included within the each slot.

Regarding claims 35 and 35, Anderson discloses a rigid body (a front wall of a chassis 12) of uniform thickness, a surface of the rigid body abutting the edge of the

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host board; and the surface including an array of openings (23), each opening from the array of openings sized to accommodate one or more modules (15a, 15b, figure 1).

Regarding claims 36-37 and 51-52, Anderson discloses an insert (20, 31) configured to cover a portion and an opening from the array of openings, the insert forming a seal with the rigid body when the insert is inserted into the opening from the array of openings (figure 1).

Regarding claims 38-39 and 53-54, Anderson discloses the insert being further configured to accommodate two modules with the first form factor, the insert and the modules with the first form factor forming two seals when the modules with the first form factor are electrically coupled with corresponding connectors from the set of connectors (figure 1).

Regarding claims 40 and 55, Anderson discloses the instant claimed invention except for the module having a second form factor.

The specific form factor of the module would have been an obvious design consideration based on the particular type of a module used.

Regarding claims 41 and 56, Anderson discloses the rigid body being fastened to the host board (figure 1).

8. Claims 31-32 and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Babineau et al. [US 6,047,172].

Regarding claims 31-32 and 46-47, Anderson discloses the instant claimed invention except for the specific module with the first form factor being a single width

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transceiver and the module with the second form factor being a double width transceiver.

Babineau et al. disclose a transceiver assembly (figures 5 and 6a-b) using therein with a single width transceiver (1). Furthermore, the prior art of Babineau et al. has shown the transceiver assembly can be used with a double width transceiver (as shown in figure 6a-b).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the transceiver design of Babineau et al. for the modules of Anderson, for the purpose of providing communication in the computer network.

The specific dimension of the module would have been an obvious design consideration based on the particular type of a single/double width transceiver used.

9. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson [US 6,166,917] in view of Lehman et al.

Anderson discloses the instant claimed invention except for the module with the second form factor, wherein the module occupies two slots from the set of slots while engaging one or more corresponding connectors from the set of connectors.

Lehman et al. a computer system (figure 1) having a host board (50) including a set of connectors mounted thereon respectively a set of slots, and at least one module (76-2) occupies two slots from the set of slots while engaging one or more corresponding connector from the set of connectors (figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use module design of Lehman et al. for the module of Anderson, for the purpose of increasing capacities.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Pusateri et al. [US 6,008,995] disclose a card cage accommodating pc cards of different sizes;
- Weng [US 6,038,126] discloses an electrical power supply assembly; and
- Nayak et al. [US 6,297,949] disclose a recessed bezel apparatus.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

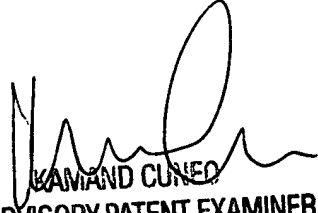
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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/6/05

Hung Bui

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